

THE PECKHAM EXPERIMENT*

By INNES H. PEARSE, M.D.

THE Peckham experiment began as far back as 1925. At that time, the interest of the eugenist was focused on the genetic factor in inheritance. Those responsible for the inauguration of the Peckham experiment, aware that it was not possible to apply to human society such knowledge of inheritance as the study of genetics had so far presented us with, and sensible of the potent effect of environment upon the new individual from the moment of conception, determined to explore the environmental factor in inheritance. This implied a comprehensive experiment in the field of social biology in which there could be brought under observation the intimate and subtle, as well as the more remote and wide effects of changes in the environment upon the individual. Such an experiment necessitated not merely a study of the earliest (maternal) environment of the embryo, but investigation of the factors involved in natural selection as evidenced in the processes of falling in love and courtship which set the stage for the début of the new individual.

If, then, we were going to deal with the effect of environment upon the child, the first requirement was to know the state of the parents to whom that child was to be born. Nowhere had any work been done on the uncomplaining or so-called "healthy" man-in-the-street or woman-in-the-home. As scientists, how were we to come into easy and natural contact with such people?

First Experiment, 1926-9

In 1926 my colleague, Dr. Scott Williamson, and I, supported by a small group of interested laymen, decided to open a small "family club" in South London. The district was chosen with some care for the fact that it housed a populace mainly of good artisan type, but including as wide an

admixture of cultural types as it is possible to find within any small area in the metropolis. It was a populace not afflicted by any continuous unemployment, and did not include any "social problem" group.

The Club consisted of a small house containing no more than a consulting room, changing room with hot bath, a very small room for social purposes, and a rough garden hut used for an afternoon nursery for children of the member-families. The inducement for any family to join was the opportunity of having a periodic health overhaul. We believed that there were parents with the good sense to jump at such an opportunity, provided that the circumstances in which it was offered were convenient to them, and did not cut across other responsibilities that they had previously assumed.

This small club was run for three years, and yielded certain findings of importance:

- (1) Examination of the man-in-the-street by modern scientific methods disclosed disorders of a pathological nature not anticipated by us nor by the families themselves.
- (2) Such disorders, when discovered at this early stage, were easier to treat and adjust than in a more advanced or chronic stage.
- (3) If individuals after their "cure" remained in the environment in which they had been living, those disorders were prone to recur.

This last was a very serious finding. It meant clearly that *periodic overhaul accompanied by early treatment of disorder was of little use if unaccompanied by measures to modify the environment in which the disorders had arisen*. This impelled us to shut down the first experiment while determining what could be done to change and modify the environment in which the families were living.

* Being the substance of an Address to the *Eugenics Society* on October 17th, 1943.

Second Experiment, 1935-9

Five years elapsed, during which time the problems were reviewed, plans laid, and funds collected for further experiment. The second experiment took the form of a specially designed club to cater for the leisure of 2,000 families living in the same district and within walking distance of the building.

The Club was equipped with all those things which experience had shown that keen and active individuals like to make use of in their leisure—a swimming bath, a gymnasium, space for games (e.g. billiards, whist, badminton, table tennis), a theatre for drama, music and cinema, a library, a cafeteria, nurseries, workrooms, etc. Thus, the Club was provided with equipment for the use of every member of any family from infancy to old age.

Our object in putting up this building was to put in the path of families a diversity of opportunity for social action and to observe the effect of the changed environment upon those families. It was necessary, therefore, that there should be free circulation throughout the building so that the families should be able to see what was going on. It was also necessary that the observers should be able to note the effect of the new environment upon family action. Hence the building was planned for visibility and free circulation throughout. Its construction was simple: three concrete platforms supported on pillars, thereby eliminating the necessity for any obstructing walls. In the middle of the building was a full-size swimming bath surrounded by a band of plate-glass window separating the bath chamber from the cafeteria on one side and the main social hall on the other. From the main hall on the first floor, one could also look down into the gymnasium and into the theatre, both rising from the ground floor; and, as one passed the gymnasium to go to the playground, one could look into the babies' swimming bath adjacent to the nurseries.

Everything was visible. One object of this provision was to test the hypothesis we had laid down, namely that the sight of

action was a natural stimulus to action—one which is perforce inoperative in the increasingly disintegrated state of contemporary society.

Constitution of the Club

A word must be said about the constitution of this Family Club. It was planned, built and equipped throughout for self-service. This gave freedom to its member-families to act without the restraint that service inevitably imposes. Apart from the individual conditions of membership, to which I will come shortly, there were no rules and no "organizers" or leaders in the Club. That the absence of rules caused difficulties in the beginning cannot be denied. And where everyone is a stranger and the majority are too shy, too diffident, too inept to begin to take hold of the opportunities before them, there is nothing more difficult than to stay one's desire to "get things going." In those early months the children, largely hysterical from too little outlet in school or home, contributed greatly to the chaos which continued until one activity after another began to *organize itself* around one or other keen individual or group of individuals exercising their skill and developing an interest in some form of activity. So, gradually, out of chaos order grew—not unlike the way a patterned order appears in the chromatic elements in the cell as, emerging from the skein stage, it takes on a new orientation. Suffice it to say, as evidence of growth of such an order in the Club, that by the fourth year of the experiment, on any afternoon in the week between 4 and 6 p.m. there could be seen some 200 to 250 children moving at will to their chosen activities amidst the general and adult society of the Club of which they were an integral part, their only point of reference being the biologist-observer and her student also at all times moving freely throughout the building. An *intrinsic* equilibrium had established itself within this society, making the enforcement of an extrinsic discipline redundant.

As well as no rules, and no organizers to see that members "got together" or used

the equipment, there were no teachers to teach *how* to use each instrument. What would people do, and how would they act, given such a new environment? were the questions asked of the equipment. There were people of every degree and many varieties of skill among the members. It was but natural that the skilled should turn to teaching those of their friends who were less skilled—and often in doing so they discovered in themselves a quite unsuspected gift for teaching. There were no professionals to set a standard. This does not mean that there were none who were expert—there were. But also there were individuals in every stage of competence with growing courage to attempt what they had never attempted before. So, in three or four years, instead of a small group of experts performing to a majority of spectators among the membership, we had nothing but “doers” in the Centre—some continuously appreciating and so learning from the expert; and others gaining the necessary courage to try from the person even less competent than themselves.

Conditions of Membership

The conditions of membership were two only: (1) payment of a weekly subscription per family, and (2) periodic health overhaul for every individual of each member family.

(1) Family membership as distinct from the usual individual membership of a club means that there are automatically gathered together people of all ages and both sexes. There is thus assembled a society in which every stage of maturity is represented, each exerting its natural biological influence upon other members of the group.

Peckham was chosen because of the cultural diversity of the families living there, so that, as well as a diversity of skills and of ages, there was a considerable degree of cultural diversity as well. The incomes of our members ranged from £2 10s. a week to £1,000 a year or more, the majority being between £3 15s. and £5 15s. a week; and in occupation the members ranged from the unskilled labourer to the lawyer, the clergyman and the doctor.

(2) The second condition of membership was periodic overhaul for every individual of each member-family. The Centre was open from 2 to 10 p.m. daily, and all overhauls were done by appointment, so that all could choose a time that suited their convenience. The first appointment was for a laboratory overhaul, when specimens were collected from each individual. Then followed a personal overhaul of each individual, where the women and children were examined by a woman, and the men and older boys by a man. The third and last appointment was for a “Family Consultation,” at which the whole family assembled to meet the two “doctors” who had examined the members of the family.

The family consultation presented us with a peculiar situation. We were not “doctors” facing “patients” suffering from symptoms who had come asking for advice. We had had an opportunity of examining the ordinary man-in-the-street and woman-in-the-home, who were not aware that they needed advice of any sort. To give *advice* in these circumstances would have been an unwarranted intrusion, as well as likely to arouse resentment. Would whatever information we had gained prove of use to the family itself, and could it be translated into lay terms? If so, should we see them take responsible action as a result of knowledge not hitherto available to them?

Thus a new technique of health consultation was evolved. At the family consultation we dealt first with the baby or youngest child. “This and this has been found, and as far as we know, it means so and so.” The baby is then taken out. The parents, somewhat taken aback, for they are little used to a situation where they are treated by those with knowledge as sensible and responsible human beings, are nevertheless interested.

Then comes the turn of the next child. When the last child has left, much of the strangeness has worn off, and a discussion follows, during which all sorts of other facts concerning the children, the family circumstances and relationships tumble out. Then the findings of the husband’s overhaul are

detailed by the man "doctor" in the presence of his wife, and the findings of the wife's overhaul by the woman "doctor" in the presence of her husband. This, too, is inevitably followed by a still more lively and intimate discussion.

It must be recalled that it was not a *medical* overhaul, but a *health* overhaul that had been undertaken. In medical overhaul search is made for what is wrong. In health overhaul the search is for what is *right*. Thus in the family consultation the emphasis falls always on what is found that is right, that which is not right arising as incidental to the general account of what has been found. No issue, however, is shirked in the final discussion between biologists and parents.

It will be convenient here to make some mention of the findings of such overhauls as were made in the four and three-quarter years preceding the outbreak of war.

Of the 3,911 individuals of both sexes and all ages examined, it was found that 90 per cent had pathological disorders which could be diagnosed by any clinician working with a modern laboratory and equipment and making a comprehensive personal overhaul of each individual. When further analysing the 10 per cent without disorder into males and females, there were found to be 16 per cent of males but only 4 per cent of females without disorders. Moreover, of these females with nothing wrong, a relatively high proportion were under fifteen years of age, thus disclosing that there were practically no women in the child-bearing period free from disorder.

This is a serious comment on the probable state of the populace, in view of the fact that it is derived from a specimen chosen as representing that section of the populace which is not embarrassed by poverty or other social problems. I do not, however, propose to enlarge on these findings here* apart from referring to the response of the families to disclosure of their defects and disorders at the family consultation.

Once the technique of giving information

* See *Biologists in Search of Material*, Faber & Faber, 1938, Section III, pp. 52-91.

without giving advice had been acquired, there was scarcely a family among the thousand or more examined who did not themselves take the necessary steps to put right what was wrong. Often after talking it over together at home, they would come back a few days after the consultation to ask where and how they could best get the necessary treatment. Thus, placing information at the parents' disposal led to voluntary adjustment on the part of the family itself of any disorders that had been found. This resulted in a growing sense of responsibility and a growing courage and capacity for action on the part of the family and of all its members.

To come back to the family consultation. If the families were young and likely to have children or more children, a brief outline was then given of what is known of the significance of parenthood—not only for their children, but as the means by which parents themselves might reach full maturity. Contraception, which in this setting falls into its place as a means of family welfare, was discussed, and it was made known that advice was available for this purpose at the Centre by appointment if required. Biological knowledge of the processes that underlie courtship and mating in the animal world were translated into general terms and afforded a means of illustrating the subtlety of the biological processes of growth and development of a family and all its integral members.

Thus parents began to grasp, perhaps for the first time, that health is not merely a state of physical fitness, but rather one of progressive unfolding of their potentialities for development—which could not take place at all without continuous contact with the outside world, and with the society in which they as a family are embedded. All these things were of intense interest to the parents, both husband and wife frequently making remarks and comments, showing that they had been dimly and intuitively aware of the deep significance that underlies their parenthood.

So, the family consultation over, they would go down and have a cup of coffee or

a glass of beer in the cafeteria by the swimming bath, and there would meet someone they knew. Inevitably the main lines of what had gone on in the family consultation—if not the more intimate personal details—would sooner or later be discussed. And perhaps the friend, an older member of the Centre, would talk about it in terms he had already made his own.

So a growing understanding of the processes of growth and development—and of the nurture of children—began to be translated by the members themselves into the vernacular. Here was, in fact, the basis for a tradition of knowledge in society. And, later, as they came with their children to the Centre, watched them at play, and began, like us, to be observers of what their children were doing, there was daily opportunity for such knowledge to gather and to grow.

By experiment we had arrived at a method whereby the democratization of biological knowledge had begun to take place through the idiom of the people, and in a situation which offered the opportunity for such knowledge to be acted upon by each in his own fashion. For this to occur naturally, a continuity of association between staff and members was necessary. Sixteen stairs down from the examination department, and the biologist could meet the family on the social floor of the Club and see them in action. When the overhaul recurred a year or eighteen months later, at the second family consultation, there was more to add: observations on the patterns of action of the members as they had moved about the Club.

So striking was the nature of these action-patterns displayed by individuals and by families that within four years the social biologist (who was not a doctor), working day by day on the floor of the Centre, found that new families as they moved about the Centre fell according to their action-pattern into three categories closely coinciding with what was later to be found on examination—those with nothing wrong with them, those with disorders of which they were unaware, and those who had something

wrong with them of which they were aware.

This subject is obviously one which demands not months but years of observation. I mention it here merely as an indication of the nature and interest of the studies which an experiment of this order opens up for future research.

Pregnancy in the Family

With such close and intimate contact with each family, and deeply interested in any change in their circumstances, it became natural as time went on for all sorts of matters of any importance to the family to be talked over with the biologist. It was thus natural, when quite casually we met downstairs, to be told that they had bought a new house, had decided to send John to a new school, or were in trouble with the landlord or the insurance company.

This was extremely valuable, for it meant that when anything important like a probable conception occurred, it was reported to us at the earliest possible moment—and that was equally the case with a wanted or an unwanted conception. At such a time another overhaul would immediately be made, followed by a "parental consultation" with the man and wife and the man and woman biologists. Here was a further and appropriate opportunity to deal with the subject of pregnancy in the family and to engage the interest of both parents in its significance for their own development. (It was also a profitable occasion to explain the disastrous effects of attempts at abortion in the case of an unwanted pregnancy.)

Within the brief space of four years we had in the Centre an increasing number of wanted conceptions. The situation was in more than one way a novel one, for where a family joined before conception had occurred both parents had been examined, and, so far as possible, had had their disorders removed *before* the conception of the child. We had started from the beginning, creating, as far as modern science allowed us, a fit intimate environment for the new individual—as well as a general environment capable

of enriching the home into which that individual was to be born.

After the first "parental consultation," the wife went to the laboratory fortnightly, and to the biologist every month. Presented thus with pregnant women who, through their periodic overhaul as members of the Centre, had rid themselves of their disorders before conception occurred, we had little to set right. So each successive ante-natal consultation became a recurring opportunity of placing at their disposal knowledge as to the developmental changes that were taking place during the course of pregnancy. Here could be stressed the importance of nutrition* not merely for the embryo but for the family as a whole, including food for both their physical and social needs during this active phase of family growth. Both husband and wife were participators in pregnancy, and, looking forward to the birth of the child; they were "expectant parents."

In this situation full attention could be given to building up the woman's reserves, checking their maintenance by means of the laboratory records. The wife was on top of her form, her capacities sharpened by use and the "tuning up" of her physiological engine. She did not experience the sickness, lassitude, tiredness and depression, nor suffer from the minor disorders so commonly regarded as "normal" at this time. So, quite naturally, she remained an active participant in the social life of the Centre with her husband. She continued to go to her "keep fit" class, to play badminton, and to swim (up to fourteen days before delivery), and was to everyone's surprise in no way remarkable in doing so. And, because they as a "family" were growing, they began to find themselves making new friends among other families in the same stage of maturity that they themselves were now approaching. Instead of retreating and retiring from society; they were growing farther into society through their own

growth. Life was acquiring a fuller savour for them both.

This very striking change in the pair during the ante-natal period had, as might be expected, its effect upon their outlook upon delivery. Labour, no longer anticipated as some drastic surgical operation, became the accepted climax to pregnancy, which the woman, feeling full of vigour, approached with the quiet confidence of being able to achieve naturally and unaided.

It was impossible to subject such women to the ordinary circumstances for delivery in which they are reduced to the status of invalids for two or three weeks. Through the courtesy of the obstetric staff of one of the teaching hospitals, who co-operated with us for this purpose, special arrangements were made for this still relatively small category of mothers. Under this scheme, the mother went into hospital for forty-eight hours—for labour and the sleep that followed—coming back to her home immediately afterwards. In this way the initiation of lactation was carried on in the intimate environment of their own home and under supervision of the Centre's midwife and biological staff. In circumstances like these one watched a smooth progress: conception welcomed, pregnancy enjoyed, labour accomplished with a sense of achievement, and no doubts or difficulties with the subsequent feeding of the child. And after a period of absence from the general social life of the Centre, first the young father would be seen again among his friends and associates, and later the mother would bring her baby to the Centre Nursery for an hour or two in the afternoon, while she joined her friends for an afternoon's sewing, or a swim and a cup of tea.

The result of this successful and easy progress of a family through pregnancy, child-birth and infant rearing, was that the having of children came to be seen amongst the Centre community not as a danger or a burden upon the parents, but as a very desirable experience. There were, indeed, indications that pregnancy taking place in these circumstances was an infectious element in the community—a stimulus to other

* The Centre Home Farm at Bromley Common provided live milk and vegetables which were made available to the family at the time of pregnancy, lactation, and the weaning of the child.

young married people to want and to have children.

If on further research this proves to be the case in general, it has a very direct bearing on the population question, and would indicate that one of the main causes of a falling birth-rate lies in the absence of the natural biological stimulus to maturity due to the isolation of the young married couple in the disintegrated state of contemporary society.

It was quite a common thing for young families who at their first overhaul expressed the firm intention of having no children, to come to us after their second or third family consultation saying that they had changed their minds. It is impossible to say whether fear had been eliminated as a result of seeing easy, natural and successful pregnancies, or how far the general environment of the Centre, with its opportunities for information and for action, was responsible. The fact that it happened within four years is nevertheless a very significant one. It is of equal importance that it happened in the case of young couples who in the intervening period had acquired neither better housing accommodation, a rise in wages, nor any other change in their financial prospects.

But perhaps of even more interest from the eugenic point of view were the young couples who, within two and a half years of opening the Centre, began of their own accord to seek to make use of the examination department to ensure that they would be as fit as possible before setting out on pregnancy. Such couples would come to us to ask if their next overhaul, due perhaps in August, might be put forward to the end of June; for they wanted to start their baby during their annual holiday in July. In these "bespoke conceptions" we find evidence of an intelligent and live parental sensibility operating from the outset towards responsible nurture of the child.

That we should have found evidence of such a deep-seated change in outlook and action in young families in instance after instance during the four and three-quarter years during which the full-scale experimental Centre was working, seems to indicate

the urgency of pursuing this research into the potency of environment upon family action.

There is a further interesting indication that has arisen from close study of the expectant mother and her child. Intractable deficiencies in the mother are very apt to manifest themselves in the child three months or more after birth. But where, however, a "floating" reserve has been maintained in the mother during the pregnancy, the child born of that woman will not only be born with a higher standard than his mother could reach, but appears to maintain it at least during the first year of life.* Time has not permitted us to carry out observations on this subject over a longer period upon the offspring, or to collect sufficient numbers to substantiate this point, but the indication has been explicit enough to demand the fullest investigations when the cessation of hostilities makes the resumption of this research possible. If true, it means something very important, namely that by the use of pregnancy as a *particularly fluid phase of differentiation* in the life cycle of the family, we can enable a child to reach and maintain a higher standard than its parents can maintain. Is there here a means of breaking the vicious circle in family inheritance?†

Courtship

But even "bespoke conceptions" are not the beginning of eugenic "practice." The new individual is subject from the moment of conception to the intimate environment created by the interrelations of the parents. This has its physical aspects (about which in the human species we know but little as yet), and its social aspects, as expressed in the nature of the home (or zone of sociobiological influence), that the parents may "induce" through the nature of their mutual interaction with their environment. These influences have their beginning in falling in love, grow in courtship, and are confirmed in the intimacies of marriage.

* See *The Peckham Experiment*, Pearse & Crocker, Allen & Unwin, 1943, pp. 141-4.

† *Ibid.*, pp. 243-5.

Thus the appropriate field for the beginning of eugenic research and practice is one in which the adolescent is moving towards the courtship phase.

To this end in the Centre there was one exception to the rule of family membership. The adolescent sons and daughters of member-families were allowed to introduce the girl or boy friend of the moment as "temporary members." Such temporary members were not offered periodic overhaul—for we were busy enough already, and boy and girl friends tend to come and go—but they had the full run of the activities of the Centre. Here, then, were young boys and girls, growing up in the midst of a general society, and passing through the phase of fleeting attractions to that of permanent attachment, in a situation where each had not merely two or three to choose from and to move amongst, but in active contact with two or three hundred of roughly the same age. There was no segregation of sexes or of ages; all therefore were subject to the influence of those slightly more mature than themselves. Thus there was no tendency for them to be confirmed in their adolescence. Parents would say to us that when a son was attracted to a girl they did not think suitable they would in the old days have worried and wondered whether they ought not to say something to the boy about it; but that as members of the Centre they were relieved of this worry, for the boy saw the girl doing a great number of things in contact with a great number of other people of all ages, and came to know for himself that she was not the type of girl he was looking for.

We had created circumstances in which there had gathered spontaneously a society of people of different ages and different

types, in which the young adolescents had a far wider choice than is possible in ordinary circumstances. We were coming nearer to circumstances in which natural selection could operate in the selection of a mate. We had created a field for the observation of human courtship. We now know that it is as easy to study human courtship as to study the courtship of birds—of which Julian Huxley has so fascinatingly written.

Conclusion

Time does not permit a description of the atmosphere of the Centre, except to say that it was an exceptionally free and natural one. Nor is it possible here to speak of the way other aspects of its work proved full of interest. The fact that the family rather than the individual was used as the basic unit for organization meant that no side of life was outside the Centre's range of observation. Hence, through its work wide fields of research hitherto unexplored have opened up and await investigation. Its facilities are unparalleled for research into the physical constitution and diathesis of the individual; into the origins of clinical disease, seen for the first time at the period of departure from health; for research into the biology of sex in its subtler manifestations; and into the socio-biology of the family group in its environmental associations. It opens up possibilities for research into psychology proper, that is to say of the healthy or so-called "normal," and for a scientific approach to education of the child from a biological standpoint. But, more important perhaps than all at this juncture in history, it affords a field for the exploration of eugenics and a rational means of translation of eugenic principles to the public need.